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SITTING ON BAYONETS? THE SOVIET DEFENSE BURDEN AND MOSCOW'S ECONOMIC DILEMMA

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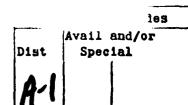
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SITTING ON BAYONETS? THE SOVIET DEFENSE BURDEN AND MOSCOW'S ECONOMIC DILEMMA *

Talleyrand is supposed to have told Napoleon, "You can do everything with bayonets, sire, except sit on them."[1] Neither can they be eaten, of course, or clothe a family. But if the society sees the development of bayonet skills as its highest purpose, the provision of food, clothing and shelter to the population will be slighted and the subordination will be justified by ideology. In most societies, however, military activities are not valued for themselves, only for the security they provide to pursue other goals. This is the first condition under which military expenditure may be said to impose a burden on the society, that defense be seen as an instrument to unrelated ends.

The second condition is that military activities use resources that would otherwise be employed in the civil economy, thereby reducing the potential level of other end uses of the national product. The existence of substantial unemployment and underutilized capacity (or the availability of gifts from an external source) might permit an expansion in military production without sacrificing civilian output. The necessity for sacrifice is, then, the essence of the second requirement for deeming defense a burden on the society. This is not to say that

^[1] Bartlett's Quotations cites a variant attributed to William Ralph Inge, "A man may build himself a throne of bayonets, but he cannot sit on it."



^[*] This paper was prepared for inclusion in a special issue of the journal Soviet Union devoted to "The Soviet Calculus of Nuclear War," under the editorship of Ellen Mickiewicz and Roman Kolkowicz.

military expenditure is not important: the national product might be considerably lower or might be significantly different in structure, as a result of enemy action, if the military budget were sharply reduced. But with near full employment the use of resources in the military sector involves a cost represented by the values forgone by not using these resources in the civil sector.

Whether the first condition is satisfied in the Soviet Union may depend on whose perspective--that of the Soviet general staff, the Politburo, the Party apparat, or of other groups--is taken as guide. Elsewhere, I have argued that "the role of military preparedness in the leaders' 'utility functions' is much more than that of an instrument to achieve other social ends."[2] Few observers doubt, however, that Soviet citizens see the goals of day-to-day living in much the same light as their counterparts in the West. For the ordinary Soviet, defense unquestionably constitutes a burden--a necessary one, to be sure, but clearly a burden. To that extent, therefore, the idea of "defense burden" must also have meaning for the most militaristic of Soviet leaders.

'Not too many years ago, the burden of Soviet defense seemed a secondary issue. The conventional estimates of the size of the burden were low and the Soviet economy was growing rapidly. Now, the era of rapid growth seems to have come to an end and the Western estimates of the burden are much higher. The conjunction generates intense interest in the relation between the two developments. Especially important is the role of the defense burden in shaping future growth prospects. How

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^[2] A.S. Becker, The <u>Burden of Soviet Defense</u>. A <u>Political-Economic Essay</u>, The Rand Corporation, R-2752-AF, October 1981, p. 35.

serious a drag on the economy does the Soviet military budget represent?

Is cutting defense spending the solution to current Soviet economic problems? Will the military budget nevertheless continue to grow?

These questions are the focus of the present paper. The next section considers the various estimates of the size of the Soviet defense burden. It is followed by a discussion of the connections between defense burden and resource allocation choices. A final section speculates on the implications for future defense spending.

How Large is the Soviet Defense Burden?

The defense burden is conventionally measured as the share of total output -- most often GNP, sometimes gross domestic product or national income--allocated to defense. It is generally known that there has been sharp controversy over the level and growth of Soviet military expenditure; there is much less argument about Soviet GNP growth rates. The awareness of controversy on Soviet military expenditure has tended to produce a diffused skepticism about all such estimates on the part of those who have neither the specialized knowledge to judge who is right nor a penchant toward one or another ideological pole in the public debate. This is not the place to attempt to resolve that controversy. At least a small monograph would have to be devoted to that subject, and as a public document that effort would be incomplete because of the barrier of classification of CIA estimates. Moreover, it is doubtful that the controversy can be "resolved" by ordinary debate: much of the conflict results from different perceptions of the nature of the USSR and different views of the desired direction of change in U.S. defense spending; these are not easily swayed by arguments about the evidence of Soviet outlays. For these reasons, the brief discussion to follow will

attempt only to sketch out the range of estimates and the major differences in methodology employed.

The controversy arises, of course, because of the unreliability of the Soviet government's official annual series of outlays on "defense."

No breakdown of these single figures has been published since the 1940s, and very little information is even provided on the meaning of these numbers. Doubts about the reliability of this series as an indicator of the total Soviet defense effort are long standing in the West, but the pattern of the 1970s has effectively settled the matter. The following is the official claim:

State Budget Expenditure on "Defense" (billions of rubles, prices of each year)

1970	17.9	1976	17.4
1971	17.9	1977	17.2
1972	17.9	1978	17.2
1973	17.9	1979	17.2
1974	17.7	1980	17.1
1975	17.4	1981	17.1

There are few Western observers who are prepared to waive the evidence of Soviet force buildup or modernization in every category of armament and in every theater of operations during this period in favor of official assertions that the growing Soviet military establishment was being purchased with a declining budget, equivalent, at official exchange rates, to roughly \$25 billion.

The alternative to acceptance of the official figure is, of course, independent estimation. A number of individuals and institutions have tried to decipher the mysteries of Soviet statistics and come up with estimates of the "true" total or of major components. The most frequently attempted route to estimating aggregate military outlays is

analysis of the Soviet state budget. There is a minimum agreement among Western observers that in addition to the official "defense" figure, military outlays are contained in the allocations to "science" (military R&D). Many observers have argued that military spending is concealed in additional budget categories, especially weapons procurement in the so-called "national economy" allocations. Still others believe there are extra-budgetary sources of defense spending.[3]

Among the developers of independent estimates based on analysis of the budget only the Stockholm International Peace Research Institute (SIPRI) is perhaps still actively engaged in the effort. The word "perhaps" is used because SIPRI's current methodology has not been revealed. For a long time, SIPRI was virtually the lone western organization relying essentially on the official Soviet "defense" figures. In 1979, SIPRI revised its estimates but provided no explanation of its revised methodology. The sole clue was a cryptic reference to a "'compromise'...which corresponds neither with the official figures nor with the CIA estimates."[4]

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The most recent yearbooks provide the following series:[5]

^[3] See the sources cited in Becker, The Burden of Soviet Defense, p. 13, notes 20 and 21, and p. 15, note 22. See also Robert E. Leggett and Sheldon T. Rabin, "A Note on the Meaning of the Soviet Defense Budget," Soviet Studies, 30:4, October 1978.

^[4] World Armaments and Disarmament, SIPRI Yearbook 1979, London and New York, 1979, p. 60.

^[5] World Armaments and Disarmament SIPRI Yearbook 1982 and 1983, London and Cambridge, 1982, p 147, 151 and New York 1983, pp. 167, 171.

Soviet defense expenditure

	in million current rubles	to gross domestic product
1972	43,300	11.4
1973	44,000	10.8
1974	44,700	10.4
1975	45,400	10.3
1976	46,000	9.9
1977	46,700	9.5
1978	47,400	9.2
1979	48,000	9.0
1980	48,700	8.8
1981	49,500	8.7
1982	50,200	n.a.

Ratio of Soviet defense

All these figures are declared to be "imputed values with a high degree of uncertainty," derived as "compromises" between the official Soviet statements and the CIA estimates.[6]

Curiously, the value series indicates virtually constant annual increments of 600 or 700 thousand rubles (1981 is a slight exception at 800 thousand), involving a rate of change of about 1 1/2 percent per year. SIPRI apparently believes there was no change in the Soviet price level over the decade, because its constant-price dollar series grows at the same rate (no constant-ruble series is presented).[7] Since it also appears to believe that GNP (or GDP) was growing more rapidly than 1 1/2 percent per year, the burden ratio declines uninterruptedly.

The other significant institutional entity relied on for its estimates of Soviet activity is the London-based International Institute of Strategic Studies (IISS). The IISS now abstains from providing its

^[6] SIPRI Yearbook 1982, pp. 153, 156, and 1983, pp. 174, 177.

^[7] Parenthetically, SIPRI believes U.S. military expenditures exceed the dollar cost of Soviet programs and have done so throughout the past decade. The margin narrows in the mid and late 1970s to a low of seven percent in 1979, but then jumps to 25 percent in 1982 (SIPRI Yearbook 1983, p. 161). Again, there are no indications how the estimates for the USSR were derived.

own estimate of Soviet military expenditure or the defense/GNP ratio, citing insufficient information and Soviet pricing practices. Instead, estimates by others are presented, ranging from the official Soviet claim to a mysterious Chinese estimate, and the entry in the IISS' expenditure table simply reproduces the range of these figures.[8]

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A less popular path to replicating total outlys is through analysis of Soviet national income (net material product) statements on the end use side. The Soviet descriptive literature on the USSR's national income accounting theory and practice permits some speculation but little informed estimating.[9]

Much attention has been focused on procedures for estimating military hardware procurement through analysis of Soviet data on the output of machinebuilding. The methodology is inherently difficult because procurement is obtained as a residual after a series of judgmental, sometimes even speculative, deductions from totals that are not known with precision.[10]

All of these approaches have in common an effort to extract information on Soviet military outlys believed to be concealed or

^[8] IISS, The Military Balance 1982-1983, London, 1982, pp. 12-13, 124. The reader is also referred back to The Military Balance 1973-1974, pp. 8-9 and The Military Balance 1976-1977, pp. 109-110. In the latter, the CIA method is compared to that of "academics," particularly William Lee (see p. 12 below). After the difference in results is noted, the editors conclude that "it is perhaps wise to suspend judgment for the moment."

^[9] On Soviet national income accounting and the place of defense expenditure therein, see A.S. Becker, <u>Soviet National Income and Product 1958-1964</u>, Berkeley and Los Angeles, 1969, Chapter 7; A.S. Becker, "National Income Accounting in the USSR" in V.G. Treml and J.P. Hardt, <u>Soviet Economic Statistics</u>, Durham, NC, 1972, Chapter 4, especially pp. 90-91; and CIA, <u>USSR</u>: <u>Toward a Reconciliation of Marxist and Western Measures of National Income</u>, ER-78-10505, October 1978.

^[10] These calculations are associated primarily with the name of William T. Lee. See below, p. 12.

disguised in Soviet economic and financial statistics. CIA, however, believes that these procedures are unreliable because of Soviet secrecy and Moscow's success in manipulating the statistical information it publishes. Moreover, even if these efforts were successful, they would not provide estimates in the detail and distribution required for intelligence purposes. Therefore, the Agency estimates outlys on Soviet forces (military expenditures less R&D) by the so-called building block method, essentially building up detailed estimates of quantities and then valuing the quantities by appropriate prices and unit costs. The Agency values Soviet outlays at 1970 prices, converts the total to factor cost and divides that by GNP at 1970 factor cost to obtain a burden ratio.

Little detail on the military expenditure calculations is available in the public domain, but the overall conclusions have been reported regularly. In the fall of 1981, the Agency testified that Soviet defense spending had been growing since 1960, and at a rate of four to five percent a year during the Brezhnev period, about the same as the growth rate of the economy. Thus, the defense claim for most of that period remained a fairly steady 12 to 13 percent of GNP. But because economic growth had worsened in the mid and late 1970s while defense spending continued to increase at its trend rate, the defense/GNP ratio was now 13-14 percent of GNP.[11] In June 1982, the Defense Intelligence Agency reported that the Intelligence Community was estimating the defense/GNP ratio as 12-14 percent: "Since 1978, Soviet military spending has continued to increase at roughly its long-term historical

^[11] Allocation of Resources in the Soviet Union and China--1981, Hearings Before the Subcommittee on International Trade, Finance and Security Economics of the Joint Economic Committee, U.S. Congress, Part 7, Washington, D.C. 1982, pp. 252-253.

rate of four percent (in constant prices) while economic growth has slowed sharply."[12] In December 1982, a CIA report to Congress spoke of "the continued rise in defense spending at the average annual rate of four percent that has prevailed since the mid-1960s," and estimated the defense GNP ratio "now" as "about 13 to 14" percent.[13]

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In early 1983, a number of newspaper articles suggested that the Intelligence Community was lowering its estimate of the growth rate of Soviet military outlays during the last half of the 1970s.[14] The only official statement so far has come from DIA, whose deputy director recently testified in Congress that "in recent years, the defense burden has been increasing steadily as economic growth slowed. It is increasingly more difficult to sustain the growth of military programs." However, the defense/GNP ratios he presented in his formal statement relate to current prices, whereas CIA estimates employ only 1970 prices. DIA's estimate of the current-price burden is 14-16 percent for 1981 and this is stated to be higher than the ratio at 1970 prices.[15]

^{[12] &}quot;Statement of Lt. General James A. Williams, Director, Defense Intelligence Agency, Before the Joint Economic Committee, Subcommittee on International Trade, Finance and Security Economics," June 29, 1982, p. 24.

^{[13] &}quot;Statement of the Honorable Henry Rowen, Chairman, National Intelligence Council, Central Intelligence Agency, Before the Joint Economic Committee, Subcommittee on International Trade, Finance and Security Economics, 'Central Intelligence Agency Briefing on the Soviet Economy,'" December 1, 1982.

^[14] Fred Kaplan, "Soviet Arms Budget Stirs Debate in U.S.," Boston Globe, February 16, 1983; Richard Halloran, "CIA Analysts Now Said to Find U.S. Overstated Soviet Arms Rise," New York Times, March 3, 1983; "Soviet Defense Outlays Rise More Slowly Than Expected," Washington Post, March 4, 1983; Robert C. Toth, "U.S. Overestimated Soviet Military Outlay," Los Angeles Times, March 4, 1983.

^{[15] &}quot;Statement by Major General Schuyler Bissell, Deputy Director, Defense Intelligence Agency, on the Allocation of Resources in the Soviet Union and China--1983, Before the Subcommittee on International Trade, Finance and S curity Economics of the Joint Economic Committee, U.S. Congres," 28 Jane 1983, pp. 18, 19, 24.

In 1982, CIA published a complete series, from 1951 through 1980, of its estimates of total Soviet military expenditure in rubles.

Simultaneously, it published detailed and documented calculations of Soviet gross national product over the same period of time. Military expenditure is not separately identified in the Agency's GNP estimates by end use, in part because a number of military outlay components are believed to be included with consumption and investment. However, the reported military expenditure totals can be divided by the GNP figures, both sets being valued at 1970 factor cost, for a standard burden measure. The individual components are shown, for selected benchmark years in Table 1.

With regard to Table 1, several comparative observations suggest themselves. First, the midpoints of the CIA outlay estimates are very much larger than the Soviet official claims--2.7 times as large in 1970, rising to more than quadruple the official estimate for 1980. The CIA estimates are also substantially larger than the SIPRI figures cited earlier--30 percent larger in 1975 and 45 percent more in 1980; given the contrasting trends of the two series, the divergence of outlay levels here too grows over time. The corresponding burden ratios are also distinctly different: by 1980 the SIPRI figure is about one-third below the midpoint CIA estimate.[16]

^[16] The SIPRI series implies an increase of 50 percent in GDP at current prices between 1972 and 1981, and an average annual growth rate of 4.6 percent. CIA's GNP series at 1970 prices grows only 32 percent in the same interval, thus at 3.1 percent per year (Measures of Economic Growth and Development, 1950-80, p. 54 and CIA Handbook of Economic Statistics 1982, CPAS 82-10006, September 1982, p. 68). As noted earlier, SIPRI apparently regards its current price military outlay estimates as equivalent to constant-price volume series.

Table 1

CIA ESTIMATES OF SOVIET TOTAL MILITARY EXPENDITURE AND GNP, SELECTED YEARS, 1951-1980

(Billion Rubles, 1970 Factor Cost)

	Military Expenditure	GNP	Defense/GNP, percent
1951	19-33	137.7	13.8-24.0
1955	24-36	174.5	13.8-20.6
1960	23-31	232.3	9.9-13.3
1965	35-43	296.8	11.8-14.5
1970	44-53	383.3	11.5-13.8
1975	53-65	459.7	11.5-14.1
1980	62 - 79	525.4	11.8-15.0

Source: Measures of Economic Growth and Development, 1950-80, Studies Prepared for the Use of the Joint Economic Committee, Congress of the United States, Washington, D.C., December 8, 1982. The military expenditure totals appear on p. 123. The GNP figures are from Part I of this volume (John Pitzer, "Gross National Product of the USSR, 1950-80"), pp. 52-54. The defense outlays also appear on p. 281 of Allocation of Resources in the Soviet Union and China--1981.

CIA's figures are substantially greater than those of SIPRI and the Soviet Central Statistical Administration, but William Lee and Steven Rosefielde have charged CIA with underestimating the recent level and rate of growth of Soviet military outlays. The Lee and Rosefielde estimates of the defense/GNP ratio are juxtaposed against those by CIA in Table 2. As compared with CIA, Lee and Rosefielde estimate considerably lower burden ratios for the benchmark years before 1970 and higher ones thereafter; the critics' ratios fall more slowly in the earlier period and rise more rapidly in the latter. The pattern after 1965 is explained by the fact that CIA's GNP and military outlay series both increase more slowly than do those estimated by Lee or Rosefielde. The sharper drop between 1955 and 1960 in the CIA ratio is largely the result of an absolute decline in the level of military outlays, whereas Lee estimates an 18 percent increase.

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Lee's estimation of military outlays has focused on the calculation of military procurement by the method of machinery residuals. There has been considerable controversy over the validity of these estimates, which are inherently subject to considerable estimating error.[17] Lee's GNP series is said to be "the result of a very modest effort--about 50 man days."[18] Rosefielde's GNP series is derived crudely by inflating

^[17] For a recent critique and alternative set of calculations, see Daniel L. Bond and Herbert S. Levine, "The Soviet Machinery Balance and Military Durables in SOVMOD," in <u>Soviet Economy in the 1980's: Problems and Prospects</u>, Joint economic Committee, U.S. Congress, Part 1, Washington, D.C., 1982, pp. 296-318, which also cites the work of Stanley Cohn in this area.

^[18] W. T. Lee, "USSR Gross National Product in Established Prices, 1955-1975," in Franz-Lothar Altmann, ed., <u>Jahrbuch der Wirtschaft</u> Osteuropas, Band 8, Munich-Vienna, Guenter Olzog Verlag, 1979, p.400.

Table 2

ESTIMATES OF TOTAL SOVIET MILITARY OUTLAYS AND THEIR SHARE IN GNP, SELECTED YEARS, 1955-1980

	Lee	Rosefielde	CIA
1955	12.1	n.a.	17.2
1960	9.4	10	11.6
1965	10.7	10.1	13.1
1970	12.6/12.9	14	12.7
1975	15.5	15.3	12.8
1977	n.a.	16.5	12.7
1980	19 (a)	n.a.	13.4

(a) "Forecast"

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Sources: Lee: CIA Estimates of Soviet Defense
Spending, Hearing Before the Subcommittee on Oversight
of the Permanent Select Committee on Intelligence, House
of Representatives, Washington, D.C., 1980, pp. 21-22.
These numbers differ somewhat from his earlier calculations
(see Becker, The Burden of Soviet Defense, p. 14).
Rosefielde: Steven Rosefielde, False Science: Underestimating
the Soviet Arms Buildup, New Brunswick, NJ, Transaction
Books, 1982, p. 201. CIA: Table 1, above, using midpoints
of the ranges shown.

official Soviet figure: of net material product by 17 percent in all years.[19] His estimate of military outlays, especially procurement, rests on an elaborate critique of CIA procedures and an interpretation of the basis for and meaning of the 1975-76 revision in CIA ruble estimates whose relevance CIA continues to deny.[20]

Figure 1 graphs the CIA defense/GNP ratio in terms of a three year moving average, to smooth out year-to-year fluctuations that are unlikely to be significant, given the nature of the underlying data.[21] Even averaged, it would probably be inappropriate to pay close attention to the annual changes displayed in Figure 1. Apart from the possibilities of estimating error, the series also has the important drawback of using 1970 prices. The burden of defense in any year is best measured in terms of the then relevant tradeoffs: usually this

^[19] Rosefielde, <u>False Science</u>, p. 198, Table 14.1. CIA's GNP estimates in current prices (see note 22 below) are 32 percent larger than the official NMP figure in 1970 and 39 percent larger in 1980.

^[20] See <u>CIA Estimates of Soviet Defense Spending</u>, pp. 77ff, and the review essay by Donald F. Burton, formerly chief of the CIA's Military-Economic Analysis Center, "Estimating Soviet Defense Spending," <u>Problems of Communism</u>, March-April 1983, pp. 85-93.

^[21] The CIA estimates were published as a range, identified as "high" and "low" estimates. The width of the band began at 14 billion 1970 rubles in 1951, declined to 8 billions in 1958-68 and subsequently climbed to 17 billion by 1980. As a proportion of the "low" entries, this margin amounted to a maximum of 74 percent in 1951, declining to about 19-20 percent in 1969-1971 and rising again to 28 percent in 1980. CIA itself does not claim high accuracy for the year-to-year changes in its series.

The numerator of the graph in Figure 1 was calculated from the midpoints of these ranges. CIA also appears to use the midpoints. See the statement by the Office of Soviet Analysis, "The Estimated Cost of Soviet Defense Activities 1965-80," in Soviet Military Economic Relations, Proceedings of a Workshop on July 7 and 8, 1982, Sponsored Jointly by the Subcommittee on International Trade, Finance and Security Economics of the Joint Economic Committee and the Congressional Research Service, Library of Congress, Washington, D.C., 1983, pp. 138-139.

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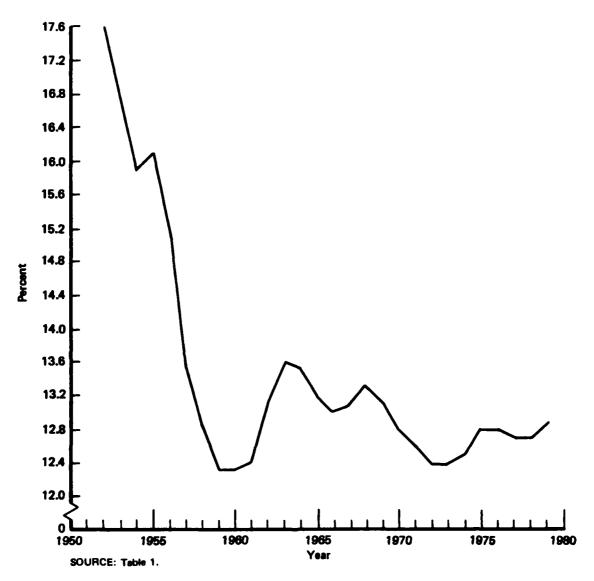


Fig. 1 — Ratio of Soviet defense spending to GNP at 1970 factor cost 1951 – 1980, three- year moving average (in percent)

would be the prices of the same year or perhaps those of a closely neighboring year. If the defense/GNP ratio cannot be measured in prices of each given year, a second best would be calculation in a linked set of constant prices, with the links as short as the data allow.

CIA has recently released a report on Soviet GNP in current prices for the benchmark years 1960, 1970, 1976, 1980, which also compares GNP growth rates calculated with different price weights. (Because military expenditure is still estimated at 1970 prices, it is not separately identified in this report.) It is estimated there that 1970 prices understate the growth rate of GNP in the 1950s and 1960s, relative to a measure in 1960 prices, and somewhat overstate the growth rate in the last half of the 1970s, relative to a measure in 1980 prices.[22] If military expenditure were not sensitive to such a change in price base, we should therefore expect the abrupt drop in the defense/GNP rate in the 1950s to be even sharper than indicated in Figure 1 and the apparent rise in the rate in the 1970s to be somewhat more marked. However, the defense numerator cannot be assumed invariant under change of price base. On the assumption that 1970 factor costs for military goods and services produced in the 1950s or early 1960s should be lower than current prices in these years, the use of 1970 prices might similarly understate the rate of change of defense in that period. Similar logic would suggest overstatement of the defense growth rate in the 1970s. Thus, there might be little net change in the pattern of Figure 1 after repricing the defense/GNP ratio at linked sets of prices.

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^[22] CIA, Soviet Gross National Product in Current Prices, 1960-80, SOV83-10037, March 1983, p. 7. The change of base years in the CIA calculations is only partial and may therefore be inexact. However, the resulting error may not be large enough to invalidate the qualitative statement in the text above, which is supported by the economic theory of production index numbers.

DIA, however, believes the burden in current prices has risen, from 13 percent in 1970 to 15 percent in 1981. Other data indicate DIA estimates of 14 percent in 1976 and 15 percent in 1980.[23] The relation between these numbers and the alleged downward revision in the Intelligence Community's estimates for the later 1970s is not clear.[24]

With these inconclusive judgments in mind, it is therefore prudent to minimize the interpretive weight placed on Figure 1. Very clearly, after the death of Stalin, the burden of defense as measured by the defense/GNP ratio was sharply reduced. Between 1952 and 1957, military outlays fluctuated up and down with no net change in absolute level. This was also the period of the most rapid economic growth, post-Stalin, resulting in the abrupt drop shown in Figure 1. According to CIA, military expenditure began a monotonic climb in 1960 which has not yet

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^[23] In General Bissell's 1983 statement for Congress (p. 19), he reports that DIA estimates Soviet defense spending in current prices "on the hypothesis that defense has absorbed a constant share of the budget since 1970." Therefore, an implicit DIA current-price military outlay series can be calculated from Soviet official budget statements (I assume the DIA hypothesis refers to state budget outlays) and then divided by CIA estimates of GNP at current prices in 1976 and 1980. DIA's GNP estimates should not be too far off those of CIA. General Bissell's 1983 statement cites figures of 387.5 billion rubles for 1970 and 650 billion rubles for 1981. CIA's figures for 1970 and 1980 are 383.3 and 635.8 billion rubles. Output is supposed to have increased in 1981, valued at 1970 factor cost, by 1.8 percent (CIA, Handbook of Economic Statistics 1982, p. 68). Thus CIA's 1981 GNP estimate would have been at least 647 billion rubles and probably more, allowing for inflation.

^[24] Franklyn Holzman believes that the defense/GNP ratio in 1970 factor cost is an upwardly biased measure of the burden in recent years, essentially on the grounds that the costs of military procurement probably declined more rapidly over the course of the 1970s than did the costs of civil end uses of GNP. (Holzman, "Soviet Military Spending: Assessing the Numbers Game," International Security, 6:4 (Spring 1982), pp. 94-95.) Actually, arguments can be adduced in either direction, for a downward or upward bias in the 1970 factor cost ratios. It is not self-evident that military modernization in the USSR necessarily meant rapid absolute and relative price decline, as Holzman asserts.

reached an end. In the two decades intervening, military expenditure increased 2.8 times and GNP somewhat less, 2.4 times. There may have been a rough cyclical movement of the defense/GNP ratio during that period, with a peak in the early 1960s and a trough a decade later: The change is relatively small, a little over one percentage point of GNP in both the early 1960s and from then to the early 1970s; the subsequent increase involves roughly half a percentage point. Again, these observations may have to be somewhat modified with respect to the late 1970s, when some deceleration in the rate of growth of the defense numerator may have taken place. More extensive revision may take place when CIA estimates are updated to a new price base.

Nevertheless, whatever the updated numbers may turn out to be, there is no question that the share of GNP allocated to military spending in the Soviet Union far exceeds that of the United States, and by a wider margin still, that of any of its NATO allies. At the height of the Vietnam war the U.S. defense/GNP ratio was less than 10 percent and it fell almost continuously until 1979, reaching a low of five percent. Even under current spending programs of the Reagan administration, the ratio is not likely to rise above 7-8 percent by 1985. To match the Soviet ratio one must look to the countries engaged in Middle East arms races, but the Soviet ratio has been maintained for two decades, an unprecedented duration even in the Middle East.[25]

Assuming that something like 15 percent is an acceptable reading of the ratio of Soviet military outlays to GNP at the beginning of the

^[25] Defense/GNP ratios for a large number of countries over the past decade are provided by the annual of the U.S. Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, and by the annual SIPRI yearbooks. Comparisons for a few benchmark years are given in the IISS annual, The Military Balance.

1980s, is this the true measure of Soviet defense burden? The CIA estimates have been criticized as too low by some and as too high by others. [26] For the most part, these criticisms judge the estimates within their own definitional framework, but is that framework itself appropriate? The critique may be viewed in two parts:

1. To weigh the social costs of military activity requires a comprehensive measure of what is military. Conventional measures of "defense" are generally limited in scope, defined largely by the functions of the institutions identified with the military -- i.e., ministries or departments of defense. This results in both overestimation and underestimation of total military outlays, the former through inclusion of military expenditure primarily benefitting the civil economy (e.g., civil construction) the latter through exclusion of outlays by civil agencies that are primarily military in character (e.g., civil defense and emergency preparedness planning). In the USSR, the exclusions seem to be much more significant than the inclusions, because the economy is more highly militarized relative to Western societies. The major examples of unaccounted military outlays relate to the cost of maintaining reserve facilities for expansion of military output and other elements of mobilization potential, including strategic reserves.

Conventionally, also, "burden" is associated with military expenditure. But the opportunity costs of a state's international

^[26] The chief "academic," as opposed to journalistic, critics are Franklyn Holzman, William Lee and Steven Rosefielde. In addition to the Holzman article cited earlier, see his earlier paper, "Are the Soviets Really Outspending the U.S. on Defense?", International Security, 4:4, Spring 1980, pp. 86-104. The major work by Lee and Rosefielde was cited in Table 2 and the rebuttal by present and former CIA officials in note 20 above.

encompass much more than military expenditure. Should one include the effect of Soviet autarkic trade policies--whether the near total autarky of mature Stalinism or the more limited policies, centered primarily on agriculture, of the Brezhnev period--or the costs of developing and maintaining the "Soviet empire" (e.g., subsidies to Eastern Europe or Cuba)? Similarly, should the U.S. burden incorporate the costs of maintaining national and alliance-wide trade controls or the costs of U.S. international involvement that form part of and are traceable to the global competition with the USSR? Most analysts have concluded that there is more merit in restricting the concept of defense burden to outlays that are identifiably military.

2. To measure the sacrifice of civil output forgone, resources devoted to military (and nonmilitary) uses should be valued at opportunity cost. [27] Ordinarily this is understood in western economic theory as the marginal factor cost of the military good or service, that is, the cost of the factors of production that must be diverted from other uses to produce one additional unit of the particular military good or service. Observed prices may understate the true social cost of that marginal reallocation because of such pricing practices as paying military labor less than the wage it could earn in civilian employment or government subsidies to manufacturers of military equipment. On the other hand, social opportunity costs may be overstated by prevailing prices if draftees are being trained in a skill that will enhance their productivity in civilian production, or if technology developed in military industry and paid for through military procurement "spills over" to civilian industry without charge.

^[27] The next few paragraphs are developed in greater detail in Becker, The Burden of Soviet Defense, pp. 4-10.

These or similar divergences between actual prices and true social opportunity cost are to be found in many developed Western countries. On the whole, however, because these states are market economies, it seems likely that a rough approximation to opportunity cost can be obtained from prevailing prices, allowing for the divergences observed by suitable discounts or supplements. This cannot be assumed for the USSR, because it is a centrally directed economy where prices are largely administered. The very meaning of price as a measure of opportunity cost must be questioned.

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LEUGESSING INVESTIGATION PROCESSION

To allow for the major distortions from the theoretical criteria of opportunity costing inherent in Soviet prices, CIA estimates of the burden are obtained by adjusting ruble values of defense and GNP to a factor cost basis. However, it has been argued that the true opportunity cost of Soviet defense is understated by the estimates employing adjusted factor costs, because they do not reflect the costs imposed on the civilian economy by the military-favoring priority system that is one of the essential operating mechanisms of the Soviet economy. For example, military industry is supplied with scarce, high quality resources often unavailable to civilian industry; the pick of production in dual-line plants may be taken for military needs, leaving the inferior product for ci i use; in the event of shortages, military programs tend to be protected, leaving civil activities to cope as they In addition, the walls of insulation that for so long separated civil and military economies and that still today are only partly permeated have prevented spillovers of usable military innovation in products, processes or, to a lesser extent, organization.[28]

^[28] Gur Ofer, The Opportunity Cost of the Nonmonetary Advantages

There is probably considerable merit in these critiques and it would be useful to develop a broader measure of the Soviet burden taking the elements of greater Soviet militarization and the opportunity costs of military priority into account. However, three qualifications might be borne in mind. First, any comparative analysis of burden would have to consider the unaccounted elements of U.S. (or other NATO) military expenditures. Outlays for mobilization planning, for example, are probably much lower in the West than in the East but they are not now counted in defense outlays. Other types of military-related outlays can also be found in the West. Second, some Soviet expenditures now counted by CIA do not burden the civil economy or do so only partially, because they benefit civilian activities. Examples are education and health outlays on the armed forces which raise the productivity of demobilized recruits; use of troops and transport to help bring in the harvest; use of construction troops to build civilian facilities. Thus any effort to calculate the "true" burden must subtract from as well as add to the CIA estimates. Third, the scale of the opportunity costs of Soviet defense depends on one's reference point. If these costs are to be measured in terms of the production potential of the economy's resource endowment, they will be very large indeed. However, the basic institutional difference between market economies and the USSR suggests that opportunity costs in the Soviet Union should be related to the set of

of the Soviet Military R&D Effort, R-1741-DDRE, The Rand Corporation, August 1975, and The Relative Efficiency of Military Research and Development in the Soviet Union: A Systems Approach, R-2522-AF, The Rand Corporation, November 1980; William Odom, "The Riddle of Soviet Military Spending," Russia (New York), 1981, No. 2, p. 55. On organizational spillovers, see Robert W. Campbell, "Management Spillovers from Soviet Space and Military Programmes," Soviet Studies, 23:4, April 1972, pp. 586-607.

output possibilities that allows for the structural inefficiences of the Soviet bureaucratized and centrally managed economy. If "opportunity" is considered in terms of what the economy realistically may be capable of achieving given its inherent, systemic inefficiences, those costs will be smaller.

The Defense Burden and Resource Allocation

That defense competes with other national product uses (under conditions of near capacity utilization and nearly full employment) is generally understood and accepted. But what is the concrete manifestation of this competition? Does defense take away equally or proportionally from all other uses or is the redistribution selective? The answers depend in part on the commodity and service structure of defense spending and, in market economies, on how the spending is financed. A military buildup that focuses on additions of manpower will have different effects from one that is directed to modernization of weaponry. Moreover, it is not only the static diversion of resources that must be considered but also the burden over time. [29] Whether the burden is shifted in whole or in part to the future depends on the extent to which current consumption is sacrificed and investment is maintained in the face of higher defense demands (investment should be understood as not just in physical entities--plant and equipment--but also in human capital). In short, government policy will largely determine how the burden is structured and distributed.

^[29] The latter in market economies is significantly affected by the financing of defense effort, the means used to divert resources from civil to military use. Taxation imposes the burden on the current generation (it also has distributional effects that may alter incentives and productivity differentially in the economy); borrowing passes the burden to future generations (although borrowing may be accompanied in the short-run by momentary disturbances that burden the current generation).

Burden is usually calculated as the quotient of defense divided by GNP (or some other measure of aggregate output). This is the indicator most often used in public discussion, whether in relation to the United States, the USSR or any other country. But this presents a highly aggregative view and submerges the choices that are made among components of total output. Examination of these choices may be made in terms of changes over time in the end-use structure of aggregate output, but more effectively with the aid of statistical-mathematical models of the economy--input-output, econometric, optimizing or combinations thereof--which attempt to capture tradeoffs through a disaggregation of total output by sectors of origin and final use.

Several attempts have been made to measure the incidence of the defense burden in western industrialized countries. The econometric analyses tend to show that defense was traded off against investment and less often against consumption; in the United States defense was apparently not traded off against government outlays on education and health.[30] Much more autonomous reactions may be expected from trade flows and the balance of payments, since these are only indirectly subject to government control.

There is only a handful of counterpart studies of the Soviet defense burden. The scarcity of data--detailed, publicly available and sufficiently long time series of Soviet national income and product, disaggregated input-output tables, and the like--long hindered attempts to develop more sophisticated and disaggregated approaches than the defense/GNP ratio. Reviewing the available studies in 1981, I concluded that

^[30] Bruce Russett, "Defense Expenditures and National Well-being," American Political Science Review, 76:4, December 1982, pp. 767-777.

More elaborate approaches to measurement of the burden support each other in the expectable demonstration of a primary tradeoff between defense and investment, with inevitable, lagged effect on aggregate growth. Effects on consumption depend on government resource allocation policy.[31]

Several recent studies dealing with tradeoffs in the 1980s are discussed below.

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MARKET SEASON INTERNAL INCOMESSION

Most Western observers are agreed that in the 1980s, Soviet leaders face a major political-economic policy dilemma. During the first decade of the Brezhnev period, the economy was growing rapidly enough (although even so at a slower pace than in the 1950s) to allow for moderate rates of increase of consumption, investment and defense. That is, all the chief claimants on the national output were being satisfied with rising absolute allocations. But in the second decade, that became increasingly difficult to accomplish as aggregate growth rates slowed alarmingly. Indeed, the Tenth Five Year Plan (FYP), covering 1976-80, provided for a sharp cut in the rate of growth of investment. While there are some grounds for the belief that investment was growing too rapidly, there is little doubt that the cutback had more to do with the regime's desire to protect the claims of consumption and defense as resource shortages loomed.[32] That decision was reconfirmed in the Eleventh Five Year Plan covering 1981-86, when the five-year investment increase was set at the lowest level since World War II, about 10 percent; state sector capital investment in each of the last three years

^[31] Becker, The Burden of Soviet Defense, p. 20.

^[32] See my "Overview" to Part III, "Military Allocations and Burden," and Myron Rush, "The Soviet Policy Favoring Arms Over Investment Since 1975," in Soviet Economy in the 1980's, pp. 287-295 and 319-330, respectively.

of the plan was to be no greater than 5-7 percent over the 1980 level.

Even so, real income per head was scheduled to increase at 3.1 percent

per year compared to the 3.3 percent claimed as achieved in 1976-80.[33]

The results of the first half of the 11th FYP must be discouraging to Soviet leaders (Table 3). National income, industrial production, industrial labor productivity, freight turnover, all failed to meet their targeted increases in both 1981 and 1982. The goal for real income per head was overfulfilled in 1981, but for 1982 virtually no increase at all is reported, so that the average increase for the two years is only 3.3 percent against the planned 5.9 percent. Agricultural output may have reached the target, averaging the decline in 1981 and the increase in 1982. In contrast, whereas the plan intended to keep investment within severe constraints, the 1981 increase was double the targeted amount; in 1982 investment rose by about two percent instead of declining or remaining stable. And in the first half of 1983, state sector investment jumped sharply. The production results of the first semester of 1983 were considerably better but do not suggest that the major FYP goals can be reached by 1985.

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The actual growth of the indicators identified in Table 3 is probably tangibly less than shown, owing to the distortions of Soviet economic statistics. CIA estimates GNP growth as only 1.8 percent in 1981 and about two percent in 1982; industrial production is estimated to have gone up by only two percent in 1981-82, consumption by only 2.4 percent in 1981 (thus allowing only a 1 1/2 percent increase in per capita consumption, compared to the claimed 3.3 percent growth in real

^[33] CIA estimates the growth of per capita consumption at only 2.2 percent per year in 1976-80 (Gertrude E. Schroeder and M. Elizabeth Denton, "An Index of Consumption in the USSR," in <u>USSR</u>: <u>Measures of Economic Growth and Development</u>, 1950-80, p. 326).

Table 3
SELECTED MAJOR INDICATORS OF ECONOMIC CHANGE IN THE ELEVENTH FYP

(Annual percent increases)

	1976-80 Average Annual Increase (a)	198 FYP Ac	_		82 Actual	198 FYP	33 Actual (c
National income							
utilized	3.4	3.4	3.2	3.0	2.6	3.2	n.a.
Industrial production	4.7	4.1	3.4	4.0	2.8	4.1	4.1
Industrial labor							
productivity	4.2	3.6	2.7	3.4	2.1	3.7	3.3
'Agricultural production	1.6 (b)	n.a	2.0	n.a.	4.0	n.a.	n.a.
Freight turnover,	•						
all transport	3.6	4.0	2.3	2.1	1.2	3.5	5.2
Investment, total	2	n.a.	3.8	n.a.	2.0	n.a.	n.a.
State sector investment	1.7 (c)	4.0	4.2	-0.7	n.a.	2.2	6.0
Real income per head	3.1	2.9	3.3	2.9	0.1	3.0	n.a.

⁽a) Implied by terminal year index number or stated in plan announcement.

Source: <u>Izvestiia</u>, 18 and 20 November 1981, 24 January 1982, 23 January 1983; <u>Narodnoe khoziaistvo SSSR 1922-1982</u>, p. 365; <u>Ekonomicheskaia gazeta</u>, No. 31, July 1983.

⁽b) Implied by the 1976-80 value sum (Narodnoe khoziaistvo 1980, p. 202) and the target of a 13 percent average annual increase.

⁽c) Implied by five year sum of percentage changes.

⁽d) First half of 1983 compared to first half of 1982.

income per head). However, CIA estimates stagnation of Soviet agricultural production in 1981, against the official report of a two percent decline.[34]

Most Western observers are also agreed that the economy is not likely to right itself for the rest of the decade: traditional "extensive growth" is hindered by the sharp decline in rate of new entrants to the labor force and the problems of increasing capital investment; the "intensive growth" that Soviet leaders have been seeking for more than a decade eludes them because of the difficulty of raising productivity. Capital productivity has fallen almost continuously over the past 30 years and labor productivity is growing much more slowly than anticipated. Combined, factor productivity of inputs of land, labor and capital has been negative by CIA measure in every year but one since 1973.[35] Since the stagnation of productivity is so clearly related to the structural rigidities of the Soviet economy, it seems apparent that the economic growth record will not turn much brighter without radical policy change. Failing such change, the problem of allocating the smaller than expected growth increments among the three chief end uses becomes more severe. Since each of the claims has great importance, the dilemma of choice is hard indeed.

In a study of Soviet resource allocation tradeoffs using an optimal control model, Hopkins and Kennedy conclude that growth prospects in the 1980s are bound to be worse than in the 1970s unless productivity turns sharply upward.[36] If in the 1970s the economy managed a three percent

^[34] CIA, <u>Handbook of Economic Statistics 1982</u>, and "Statement of the Honorable Henry Rowen..."

^[35] CIA, Handbook of Economic Statistics, various annual issues.

^[36] Mark M. Hopkins and Michael Kennedy, with the assistance of Marilee Lawrence, The Tradeoff Between Consumption and Military

per annum growth rate of consumption while increasing military expenditure at 4.5 percent, the same pace of military expansion would bring total consumption growth down to 2.5 percent; alternatively, a three percent growth rate of consumption would allow only a two percent increase of military expenditure. [37] Wharton Econometric Forecasting Associates work with an econometric model of the Soviet economy (SOVMOD) and several of their analyses were discussed elsewhere. [38] A brief recent paper from this organization indicates baseline results similar to those of Hopkins-Kennedy: With defense outlays growing at 4.5 percent per year in the 1980s, total consumption and consumption per capita are limited to 2.5 and 1.6 percent, respectively. This scenario assumes "hesitant and only moderate growth in trade with the West." However, the key assumption, clearly, is the size of total factor productivity growth: It increases at an average rate of 1.1 percent, derived from the 1968-78 estimated average for major sectors.[39] This rate seems high relative to Soviet experience during most of the 1970s as calculated by CIA.

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Expenditures for the Soviet Union During the 1980s, R-2927-NA, The Rand Corporation, November 1982. Hopkins-Kennedy examine two aspects of productivity-conventional factor productivity (of all inputs) and differences between the efficiency of imported and domestic capital equipment.

^[37] This base case projection may be somewhat optimistic in that it assumes a positive rate of change of factor productivity equivalent to the rate attained in the first half of the 1970s, whereas since 1973 productivity has been negative. While the economy cannot indefinitely tolerate declining productivity, it may take a number of years to achieve sustained positive growth.

^[38] Becker, The Burden of Soviet Defense, pp 19-20, 69-71.

^[39] Daniel L. Bond, "Macroeconomic Projections of the Burden of Defense In the Soviet Economy," in <u>Soviet Military Economic Relations</u>, pp. 184-191. Bond also reports the results of a high and low scenario: the first assumes extensive reform and increased East-West trade, with defense expenditures cut back to 2.5 percent increase per year; the low scenario postulates a defense growth rate raised to 7.5 percent and poor economic relations with the West.

Another recent simulation of Soviet tradeoffs, using a different type of model, is more pessimistic for the Soviet lattitude of choice. Hildebrandt finds that a 4.5 percent per year growth in military expenditure during the 1980s would allow per capita consumption increase of only 0.3 percent per year-hence, total consumption growth of little more than one percent per year. [40]

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For present purposes, the interest in the three studies cited is not which is "correct": The interpretation of the results of model simulations depends on the nature of the model—its assumptions, form of the functions, and values of key parameters. The three studies employ models that are quite different in structure. All three, however, point up the serious choice problems imposed on the Soviet leadership by the combination of "objective" factors—primarily the decline in the rate of growth of labor inputs (to which one might also add the increasing cost of the changing geography of raw material production)—and the sharp decline in system productivity. If the economy is to escape its fundamental growth dilemma in the next decade it will only be by attacking the productivity problem.

The importance of this conclusion is underscored by considering the possible help that can be obtained from cutting back on defense costs. The various simulation studies are generally agreed that the overall growth benefits derived just from trimming military expenditure growth are limited: although the defense budget is now sizeable, the postulated changes are small relative to the very large volume of fixed

^[40] Gregory G. Hildebrandt, "The Dynamic Burden of Soviet Defense Spending," in Joint Economic Committee, U.S. Congress, Soviet Economy in the 1980s: Problems and Prospects, Part 1, Washington, D.C., 1982, pp. 331-350.

capital in the society. Thus, the cutbacks would have to be substantial and prolonged to have a significant effect on the growth rate of GNP. Depending on how the savings are reallocated, the effect on consumption could be more apparent. [41] Assuming that savings in military procurement are allocated to capital formation, Hildebrandt is most pessimistic, estimating only a 1/2 percent increase per year in per capita consumption when the defense budget is frozen at the 1980 level. Hopkins-Kennedy are most optimistic: in their base case, freezing the defense budget yields an increase in the per capita consumption growth rate of one percent. Only if the defense outlay change is accompanied by other measures that raise the productivity of resources in usereconomic reform, increased imports of Western technology, etc.--do the effects become substantial, even in the medium term.

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These results assume that the same resources are equally productive in different uses. However, if defense resources are considerably more productive than civilian resources,[42] there should be a boost to growth prospects over the long run. But, according to Hildebrandt, this is a very long run, for the effects on productive capacity and consumption even during a decade will be miniscule.[43] To the extent that the defense freeze contributes to elimination of bottlenecks and shortages, some additional relief in the civil production sector may be anticipated.

^[41] In technical terms, the elasticity (with respect to defense) of consumption is considerably greater than that of GNP.

^[42] In terms of either input quality or the defense sector environment, which is then (somehow) transferred along with the resources reallocated.

^[43] Hildebrandt, "The Dynamic Burden...," p. 340.

More important than restricting the growth of defense spending-a more likely prospect than a cut in the absolute level of spending-would be to curb the military priority system. [44] The latter's effects on the civil economy, briefly described earlier, are difficult to measure, but they may have become increasingly important in the last decade. The growth of Soviet military power, along with the growth of the economic foundations on which it rested, were the prime goals of the economic system implanted on the USSR by Stalin. With its organizational apparatus and central directive mechanisms, the economic system was geared to the promotion of these goals by a strategy of mobilization of resources. Mobilization processes tended to ignore considerations of initiative, innovation and productivity. But resource constraints have forced the leaders to recognize the need to move from "extensive" to "intensive" growth strategies. At this point there has emerged in the land of Marxism-Leninism an embarrassing contradiction between the requirements for future growth and the system of production. The chief structural deficiencies of the system are perverse incentives, overcentralization and bureaucratization, but the dead hand of the military priority system is an important contributor. Once, the priority system was essential to insuring the implementation of regime goals, which involved, among other things, the subordination of consumer interests. Now the priority system is helping to choke off the fragile efforts to raise productivity in the economy. This problem significantly complicates the economic policy choices of the 1980s.

^[44] Weakening the military priority system would, however, diminish the momentum behind defense spending plans at any level and would therefore result in lower growth rates.

Although freezing the military budget in itself would provide little stimulus to the economy, the effects of accelerating Soviet military spending can be more marked. If the annual increase in the defense budget is raised from 4.5 to 7.5 percent, per capita consumption will virtually stagnate in the Hopkins-Kennedy model and turn negative in the Hildebrandt and SOVMOD models. [45] Additional production bottlenecks and shortages that might result from increasing the pace of defense spending would inflict heavier penalties on consumption and overall growth.

To sum up: Accelerated defense spending poses grave dangers for the economy and the society, unless productivity is sharply raised; even if military budget growth is cut to zero, the economic effects will be small, without additional help from improvements in productivity. Productivity is the key to unlocking the Soviet growth dilemma. Andropov seems to appreciate that simple but fundamental reality. At the June 1983 Plenum of the Party Central Committee, he called for a "radical improvement in planning and management." The new regime has begun to deal with some of the simpler dimensions of the problem --discipline, corruption, wage incentives, and the like. But coming to grips with the bedrock systemic causes of Soviet productivity lag will be another matter altogether.

^[45] As Hildebrandt (p. 338) explains the contrast with the case of freezing the defense budget, "the capital goods transferred to defense in the higher [defense] growth case cost the civilian sector more output at the margin than the output gain it would obtain if defense sector growth were reduced."

Implications for Future Defense Spending

Andropov's dilemma is essentially Brezhnev's dilemma. Personality differences lead to different styles of leadership and to different approaches to management. But the nature of the Soviet economic problem is unchanged and so too are the costs of either radical action or temporizing. Both options risk significant political dangers, the one through high level group conflict or direct loss of control, the other through the indirect effects of rampant alienation or possibly increasing dissidence. It is therefore not surprising that the likely effects on the near or mid term course of the Soviet defense budget seem much as they appeared a few years ago.[46]

The policy options just outlined are probably felt more acutely because the Kremlin is so sensitive to the ever-perceived threat of military buildup by the Soviet Union's enemies, West or East. Over the past two decades that sense of threat has seemed poorly connected to the real spending behavior of either the United States or the PRC. The USSR's propensity to expand its military expenditure from year to year is rooted in security concepts that pose almost open-ended demands for military resources; it is anchored in a political structure that fuses party and military in unchallenged control of policy formation and implementation on security issues. There is, therefore, enormous momentum behind the Soviet military buildup, and the economic rationale for changing course has been and probably will be strongly resisted.

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If Soviet-American relations do not deteriorate further and for political-economic considerations, the growth of defense spending may,

^[46] Becker, The Burden of Soviet Defense, Section V.

at least temporarily, stabilize at a lower level. It is hard to imagine the Soviet Party-Military-Industrial Complex consenting to cut back absolutely on its indefinite commitment to maintain and strengthen Soviet armed forces. However, even economic difficulties would not prevent a vigorous Kremlin response to perceived intensification of the external threat. In that event, the domestic economic and political costs are likely to be faced squarely, with results that could cast Soviet society back into its dark age.

On economic as well as on other grounds, however, Moscow will probably continue to be reluctant to embark on an intensive arms race, requiring major acceleration of defense spending. The strains of such a course could be serious. Brezhnev chose to avert that danger by political action to degrade the threat, the "peace campaign." That is apparently still the main Kremlin strategy. Soviet growth retardation is an even more palpable problem in 1983 than in 1980-81; perhaps it is also viewed with greater gravity now. There is, too, a prospect of some dampening of the American military drive, through domestic economic and political pressures. Under these conditions, the strategy of political erosion of the Western threat while holding the line on defense spending still seems the best bet.

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